

**Airport Planning Workshop**

***An Airline's Perspective  
On Airport Planning***

San Jose, California

September 12, 2006

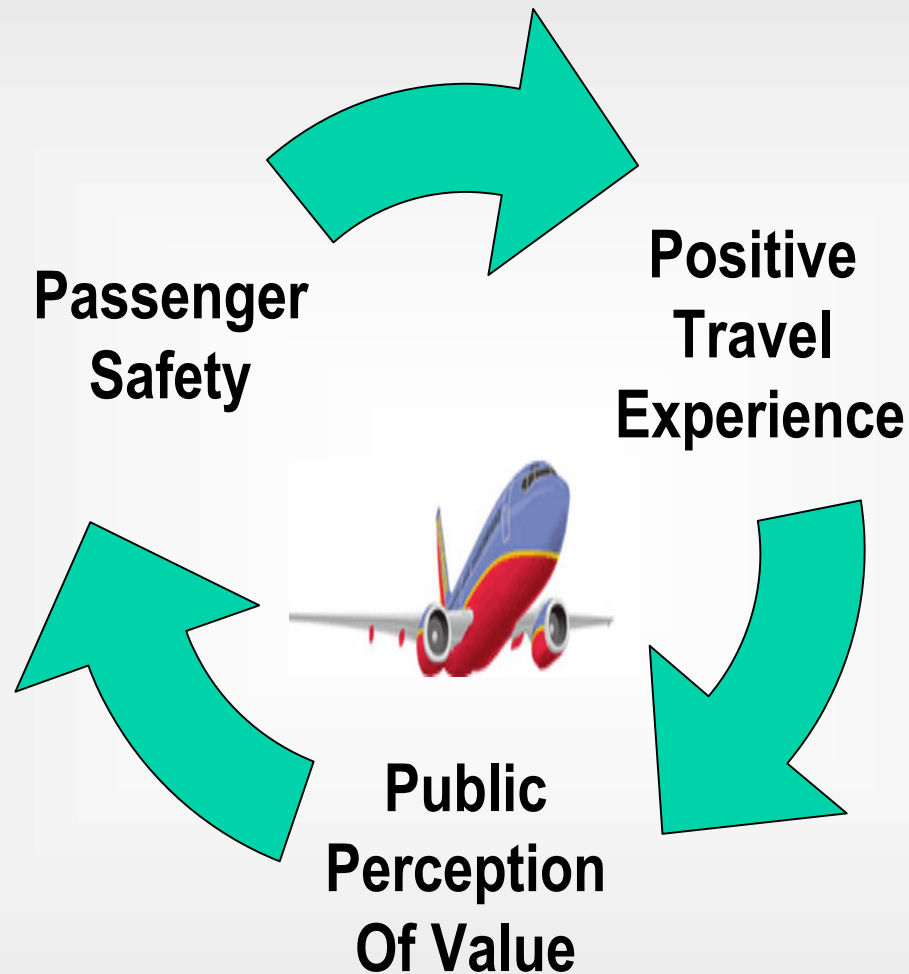
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## Discussion Outline

- Airline Industry from An Airline's Perspective
- Challenges Met Since September 11, 2001
- Considerations For Moving Forward
  - J Baggage Handling
  - J Security Checkpoints
  - J Future Airport Designs

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## Airline Industry Success Drivers



***Security Has An Impact On All Aspects Of Our Business***

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## Industry Challenges Faces Since 9/11

- **Rapidly Changing Environment**
- **Limited Space**
- **Efficient Use of Limited Funds**
- **Decentralized TSA Model**

***A strong partnership between Airlines and Airports will continue to be essential to our mutual successes . . .***

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## Industry Challenges

### Rapidly Changing Environment

- **Federal Government / TSA:**

- Evolving regulatory compliance specifications
- Evolving response to the “next threat”
- Movement towards Cargo and to other industries

- Airlines and airports **struggle to respond** quickly to these changes

- **Time to deploy** systems can result in antiquated solutions

### Decentralized Approach

- Security designs **delegated** by the TSA to the airports
- **Little standardization** between airports
- **Proven expertise** is limited within the industry

### Limited Space

- Airport design for **Passenger convenience**
- **Large technology footprints** limit throughput
- **Inconsistencies across airports** cause confusion for our Customers

### Efficient Use of Limited Funds

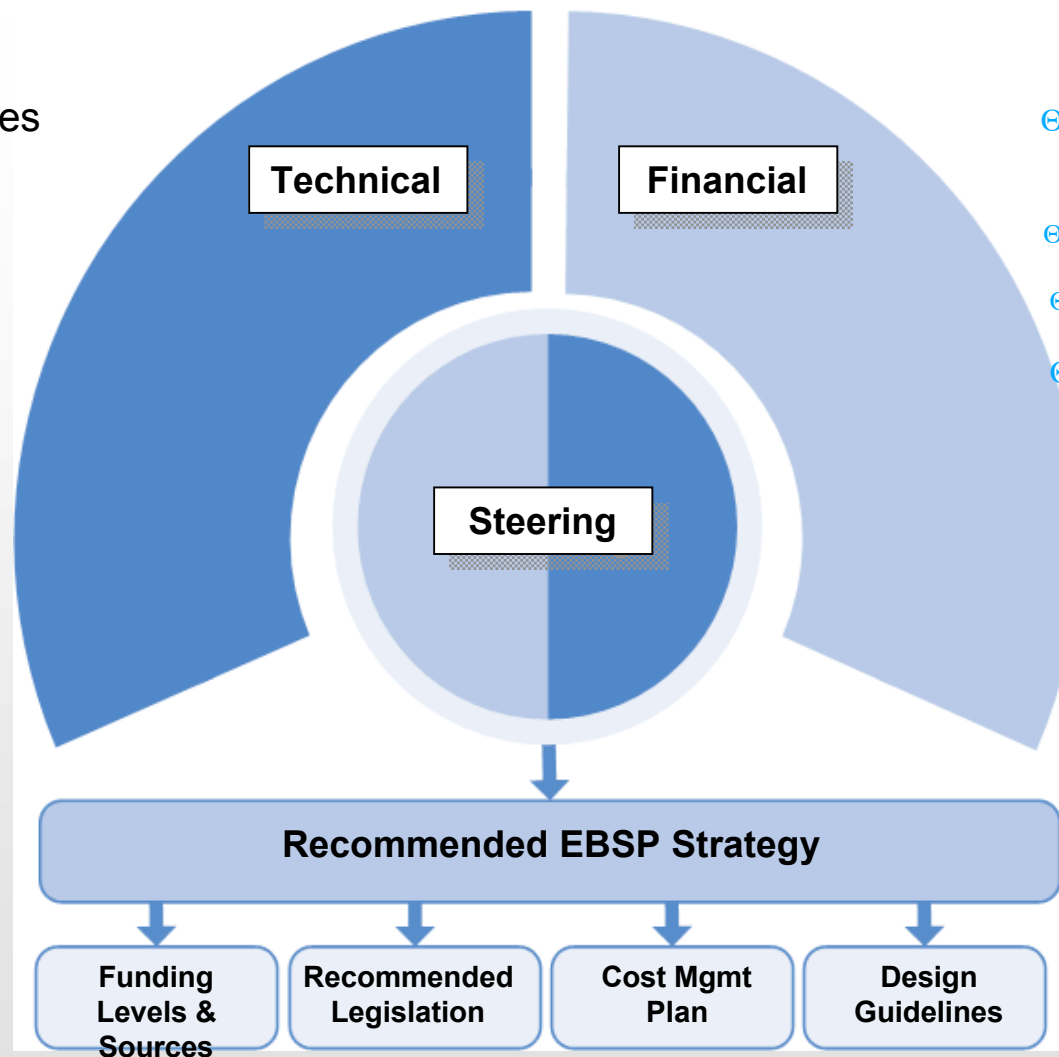
- **Limited TSA funds** for staffing and capital projects
- **Burden of ownership** pushed to airports and airlines
- Little tolerance by public for “open checkbook” mentality: **ticket prices**

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## And Of Course The Biggest Challenge: Managing Costs

### TSA's Baggage Screening Investment Study

- Screening Technologies
  - Current and new
- Best practice designs
- Publish Planning and Design Guidelines
- Staffing Strategies
- Security Policies & Screening Protocols
- Costs & Benefits
- Prioritization Criteria
- Optimal System Templates



- Alternative Funding Sources
- Financing Alternatives
- Legislative Concepts
- Prioritization Criteria

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## Baggage Screening Considerations and Lessons Learned

### 1. *System Capacity*

- **Conveyors** affect throughput as much as the baggage screening machines
- **Single conveyor lines** into/from a screening matrix limit capacity to +/-1800 bags per hour (regardless of the number of baggage screening machines within the matrix)
- Allow capacity for the system to **“breath”** (higher than normal bag rates within small peaks)

### 2. *Support of the Airline’s Operations*

- **Bypass and contingency features** within the system design
- **Audio and visual communications** alert Customer Service and Ramp operations to exceptional bag volumes, system problems and operational recovery progress
- **Access** the entire system for maintenance and repair drives response times and costs
- Visibility to **system and operational information** to measure performance and trends

### 3. *Flexibility Can Greatly Influence Overall Cost Of Ownership*

- Ability to make **adjustments** to existing system configurations
- Ability to **conform** to future TSA protocol changes and screening technology deployments

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## Security Checkpoint Considerations and Lessons Learned

### 1. *Passenger Capacity*

- **Carry-on baggage** not Passengers are generally the bottleneck to throughput
- Provisions for effective **Passenger queuing** has a significant impact on throughput
- Use of “**special lanes**” serve to confuse and frustrate the general public, as well as, degrade TSA productivity

### 2. *Flexibility Will Sustain Long-term Use of Space*

- **Uncertainty** of the security technologies and space requirements will continue to evolve rapidly
- Design Security Checkpoint areas with **significant depth and width** to accommodate changes to TSA protocol and screening technologies
- Well placed **facilities and concessions** on either side of Checkpoints provide best Customer Service
- TSA productivity is improved by **co-location of personnel and working spaces**



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## Terminal Design Considerations and Lessons Learned

- Creating a **positive airport environment** (lighting, signage, Passenger circulation space, etc.) improves tolerance for perceived security inconveniences
- **Curb-side service** is now a core part of the Customer Service operation and should be given adequate consideration as a Customer touch point
- **Remote bag screening facilities** can provide a “relief valve” for overflow capacity which allows for optimized “normal operation” BHS systems
- Think creatively to get **best use of existing airport facilities/space** in order to avoid costly facility construction
- **Centralized TSA and BHS monitoring functions** work well for support of multi-system operations

Thank You For Your Time!